



#8/Petition

Attorney Docket No. 3192/2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**RECEIVED**

In re Application of:

APR 02 2003

Hideyuki YAMANAKA

OFFICE OF THE

Serial No. 09/822, PROGRAMS EXA: Group Art Unit: 2856

Filed: April 2, 2001

Examiner: R. Raevis

For: SYSTEM AND MONITORING THE BEHAVIOR AND ENVIRONMENTAL  
CONDITIONS OF A HIGH PRECISION ELECTRONIC APPARATUS

REQUEST TO WITHDRAW NOTICE OF ABANDONMENT

Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

Applicant hereby requests withdraw of the Notice of  
Abandonment.

Applicant filed a Response in the above-identified  
application on January 25, 2002, and in a subsequent telephone  
conversation with the Examiner learned that the application  
had been abandoned for failure to reply to a Notice of Non-  
Compliant Amendment. The Examiner forwarded a copy of the  
Notice of Non-Compliant Amendment to Applicant and stated that  
the office had sent the Notice of Non-Compliant Amendment on  
February 7, 2002.

Applicant did not receive the Notice of Non-Compliant  
Amendment. Further, Applicant submitted a Change of Address  
Notice to the office on March 15, 2002 copy attached and  
worked at the former and occupied the premises of the former  
address of record until that date. Further, Applicant's  
attorney arranged to have any documents submitted from the  
Patent Office to a former address forwarded to the new  
address.

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Accordingly, it is Applicant's contention that the Notice of Abandonment should be withdrawn and the application be revived. Applicant is also submitting herewith a Response to the Notice of Non-Compliant Amendment.

Respectfully submitted,

March 11, 2003  
Date

By: 

David E. Dougherty  
Reg. No. 19,576

Dennison, Schultz & Dougherty  
612 Crystal Square 4  
1745 Jefferson Davis Highway  
Arlington, VA 22202  
Tel: 703-412-1155 - Ext. 17  
Fax: 703-412-1161



Attorney Docket No. 3192/2

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: :  
Hideyuki YAMANAKA :  
Serial No. 09/822,417 : Group Art Unit: 2856  
Filed: April 2, 2001 : Examiner: R. Raevis  
For: SYSTEM AND MONITORING THE BEHAVIOR AND ENVIRONMENTAL CONDITIONS  
OF A HIGH PRECISION ELECTRONIC APPARATUS

RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT

Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

In Response to a Notice of Non-Compliant Amendment, (37 C.F.R. 1.121), Applicant is submitting herewith a marked-up copy of an Abstract. That Abstract was submitted pursuant to Applicant's request and had not been objected to in the prior action.

Applicant is also submitting herewith a copy of the original Amendment as filed on January 25, 2002 which included Appendix B which is a marked-up copy of the amended paragraphs in the specification. Further, claims 1-3 were cancelled and new claims 4, 5, and 6 were added. Accordingly, it is respectfully submitted that there was no need to provide a marked-up copy.

Respectfully submitted,

March 11, 2003

Date

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Tel: 703-412-1155 - Ext. 17  
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By: 

David E. Dougherty  
Reg. No. 19,576



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 UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
 DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE  
 WASHINGTON, DC 20231  
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Paper No. 6

## Notice of Non-Compliant Amendment (37 CFR 1.121)

The amendment filed on 1/25/03 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121, as amended on September 8, 2000 (see 65 Fed. Reg. 54603, Sept. 8, 2000, and 1238 O.G. 77, Sept. 19, 2000). In order for the amendment to be compliant, applicant must supply the following omissions or corrections in response to this notice.

THE FOLLOWING ITEMS ARE REQUIRED FOR COMPLIANCE WITH RULE 1.121 (APPLICANT NEED NOT RE-SUBMIT THE ENTIRE AMENDMENT):

- ☐ 1. A clean version of the replacement paragraph(s)/section(s) is required. See 37 CFR 1.121(b)(1)(ii).
- ☒ 2. A marked-up version of the replacement paragraph(s)/section(s) is required. See 37 CFR 1.121(b)(1)(iii).
- ☐ 3. A clean version of the amended claim(s) is required. See 37 CFR 1.121(c)(1)(i).
- ☒ 4. A marked-up version of the amended claim(s) is required. See 37 CFR 1.121(c)(1)(ii).

Explanation:

The Abstract and the amended paragraphs should have a marked up copy be attached sheet

(LIE: Please provide specific details for correction to assist the applicant. For example, "the clean version of claim 6 is missing.")

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714 and the USPTO website at <http://www.uspto.gov/web/offices/dcom/olia/pbg/sampleaf.pdf>. A condensed version of a sample amendment format is attached.

- ☐ **PRELIMINARY AMENDMENT:** Unless applicant **supplies the omission or correction** to the preliminary amendment in compliance with revised 37 CFR 1.121 noted above within ONE MONTH of the mail date of this letter, examination on the merits may commence without entry of the originally proposed preliminary amendment. This notice is not an action under 35 U.S.C. 132, and this ONE MONTH time limit is not extendable.
- ☒ **AMENDMENT AFTER NON-FINAL ACTION:** Since the above-mentioned reply appears to be *bona fide*, applicant is given a TIME PERIOD of ONE MONTH or THIRTY DAYS from the mailing of this notice, whichever is longer, within which to **supply the omission or correction noted above** in order to **avoid abandonment**. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

\_\_\_\_\_  
 Legal Instruments Examiner (LIE)

(Rev. 12/01)

## ABSTRACT

A system for monitoring the behavior and environmental conditions of a high precision electronic apparatus comprising a measuring device section (M) including a plurality of sensors (12,13,14,15,16 and 17) arranged around said high precision electronic apparatus (P) which is mounted on a vibration preventing mount (B) for detecting environmental conditions as analog data signals, and means for filtering and amplifying each of said analog data signals (20,21 and 22), and a computer system section (C) connected with said measuring device section (M) having an A/D convertor (32) for converting said analog data signals into digital data signals, a data collection circuit (34) for collecting said digital data, means (38) for recording and setting prescribed allowable environmental condition data, means [(39)]<sup>(42)</sup> for comparing said allowable environmental condition data with said digital data, means [(40)]<sup>(46)</sup> for producing warning signal if abnormalities between said allowable environmental condition data and said digital data obtained in operation of said apparatus, a [Fast] FIRST Fourier Transform (FFT) analyzer [(41)]<sup>(38)</sup> for converting said digital data so as to display as a graph on a monitor [(37)]<sup>(44)</sup>, a read-only memory [(42)]<sup>(48)</sup> for storing said digital data, means [(43)]<sup>(50)</sup> for calculating fluctuation of said magnetic flux data, means [(44)]<sup>(52)</sup> for calculating fluctuation of said vibration data, and means [(45)]<sup>(54)</sup> for storing said fluctuation of said magnetic flux and vibration data as temporal data.



Attorney Docket No.: 3192/2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
: **YAMANAKA** : Group Art Unit: **2856**  
:   
Serial No.: **09/822,417** : Examiner: R. Raevis  
:   
Filed: **April 2, 2001** :  
:   
For: **SYSTEM FOR MONITORING THE:**  
: **BEHAVIOR AND** :  
: **ENVIRONMENTAL...** :

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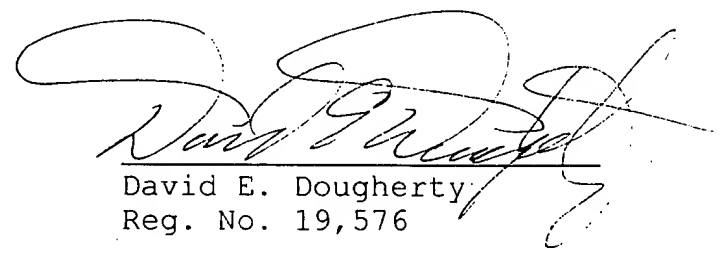
CHANGE OF ADDRESS

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:  
Effective March 18, 2002, please forward all further  
correspondence in this application to David E. Dougherty at  
the new address as follows:

David E. Dougherty  
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612 Crystal Square 4  
1745 Jefferson Davis Highway  
Arlington, VA 22202  
Tel: 703-412-1155 Ext. 17  
Fax: 703-412-1161

Respectfully submitted,

  
David E. Dougherty  
Reg. No. 19,576

March 15, 2002  
Date

David E. Dougherty  
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Inventor: **YAMANAKA** Serial No: **09/822,417** Docket No: **3192/2**

For: **SYSTEM FOR MONITORING THE BEHAVIOR AND ENVIRONMENTAL...**

Due date: **January 26, 2002** Date filed: **January 25, 2002** Initials: **DED/dmt**

This will acknowledge receipt in the Patent & Trademark Office of the following:

- |  |   |
|--|---|
| <input type="checkbox"/> New patent application (37CFR1.53b)                             | <input type="checkbox"/> Claim for priority                   |
| <input type="checkbox"/> Provisional patent applic.(37CFR1.53c)                          | <input type="checkbox"/> Priority document                    |
| <input type="checkbox"/> Continued prosecution applic.(37CFR1.53d)                       | <input checked="" type="checkbox"/> Amendment                 |
| <input type="checkbox"/> _____ pages of Specification; _____ Claims                      | <input type="checkbox"/> Info. Discl. Statement; _____ Refs.  |
| <input type="checkbox"/> _____ sheets of Drawings; Figs _____                            | <input type="checkbox"/> Petition for Ext. of Time; _____ Mo. |
| <input type="checkbox"/> Combined Declaration & Power of Atty.                           | <input type="checkbox"/> Issue fee transmittal                |
| <input type="checkbox"/> Small entity declaration  | <input type="checkbox"/> Notice of Appeal                     |
| <input type="checkbox"/> Assignment  | <input type="checkbox"/> Appeal Brief (triplicate)            |
| <input type="checkbox"/> Revocation of pwr. of atty. & Appointment of new atty.          | <input type="checkbox"/> Transmittal cover sheet              |
| <input checked="" type="checkbox"/> Other: <b>Proposed drawing changes marked in red</b> |   |

- |   |                                    |
|---|------------------------------------|
| <input type="checkbox"/> Trademark applic.        | <input type="checkbox"/> Drawing   |
| <input type="checkbox"/> Trademark applic.        | <input type="checkbox"/> Specimens |
| <input type="checkbox"/> Section 8 & 15 Affidavit |                                    |





Attorney Docket No. 3192/2

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: :  
: :  
YAMANAKA : Group Art Unit: 2856  
: :  
Serial No. 09/822,417 : Examiner: R. Raevis  
: :  
Filed: April 2, 2001 : :  
: :  
For: SYSTEM FOR MONITORING THE : :  
BEHAVIOR AND : :  
ENVIRONMENTAL... : :

AMENDMENT

Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

In response to the Office Action of October 26, 2001,  
please amend the above-identified application as follows:

IN THE SPECIFICATION:

Rewrite page 5, paragraphs 3, 4 and 5 as shown in  
Appendix A.

IN THE CLAIMS:

Cancel claims 1-3 and enter new claims 4, 5 and 6.

--4. A system for monitoring the behavior and  
environmental condition of a high precision electronic  
apparatus comprising:

a measuring device section including a plurality of  
sensors, a microphone and wind gage arranged around said  
electronic apparatus which is mounted on a vibration  
preventing mount for detecting said behavior and environmental  
condition as analog data signals, and means for filtering and  
amplifying each of said analog data signals, and

a computer system section connected with said measuring  
device section having an A/D convertor for converting said  
analog data signals into digital data signals,



a data collection circuit for collecting and dividing said digital data into the first real time data signals consisting of magnetic flux, temperature and wind speed data in said analog signals and the second real time data signals consisting of vibration and noise in said analog signals obtained from said measuring device section,

means for recording allowable behavior and environmental condition data with respect to said electronic apparatus, and

means for giving warning signals to operators of said electronic apparatus if abnormalities between said behavior and environmental condition data and said data signals obtained in operation of said electronic apparatus,

a First Fourier Transform (FFT) analyzer for converting said first and second real time data signals so as to display as a graph on a monitor,

a read-only memory for storing said first and second real time data signals,

means for calculating function of said magnetic flux data, and

means for calculating fluctuation of said vibration data, and means for storing said fluctuation of said magnetic flux and vibration data.

5. A system as claimed in claim 4, in which said sensors include flux sensor for detecting the magnetic field in the environment of said electronic apparatus, a first vibration sensor for detecting the vibration of said electronic apparatus, a second vibration sensor for detecting the vibration of a mount of said electronic apparatus and a temperature sensor for detecting the temperature in said environment.

6. A method for monitoring the behavior and environmental condition of a high precision electronic apparatus including steps for:

detecting the magnetic field, noise, temperature and wind speed in the environment of said apparatus as analog data, filtering and amplifying all of said analog data signals, converting each of said analog data signals into digital data, collecting said digital data signals, recording allowable behavior and environmental condition data with respect to said electronic apparatus, comparing said allowable behavior and environmental condition data with said analog data, displaying the comparative result of said allowable data with said digital data on a monitor, and giving warning if the result of said comparison is abnormal.--

**IN THE ABSTRACT:**

Substitute the new Abstract as attached hereto and entitled Abstract for the original Abstract.

**REMARKS**

Applicant is submitting herewith proposed changes to the drawings with changes marked in red. Applicant has also rewritten paragraphs 3, 4 and 5 on page 5 and continuing onto page 6. A marked-up copy of those paragraphs is enclosed herewith as Appendix B. Applicant has also rewritten the Abstract.

In the aforementioned Office Action, the Examiner objected to the drawings because they do not include reference signs mentioned in the description, i.e., "C", "B" monitor "37" memory "41" and device "43". The drawings were also objected to as failing to comply with 37 CFR 1.84(p)(5) because they include a number of reference cites which were

not mentioned in the descriptions: elements 48, 50, 52, 46 and 64 of Figure 1B.

It is respectfully submitted that the revised specification and proposed drawing changes overcome the aforementioned objections.

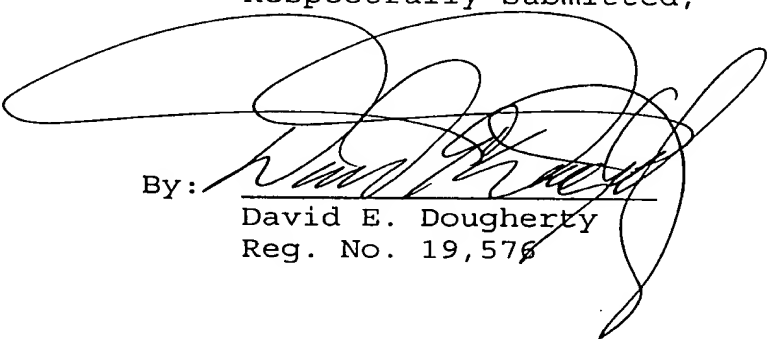
Claims 1-3 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In making that rejection, the Examiner questioned "...does the means for setting really set ("setting" on line 10) prescribed allowable environmental condition data. Applicant has rewritten claim 1 to overcome this as well as the other objections to claims 1-3. Accordingly, it is respectfully submitted that claims 1-3 are now in proper form for allowance.

Since all of the claims are now in proper form and clearly and patentably distinguished over the cited art, prompt, favorable action is earnestly solicited. It is also respectfully requested that if this amendment does not place the case in condition for allowance, that the Examiner place a call to applicant's attorney so that any issues may be immediately resolved.

Respectfully submitted,

January 25, 2002  
Date

By:

  
David E. Dougherty  
Reg. No. 19,576

David E. Dougherty  
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5205 Louisbourg Pike  
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Facsimile: 703-575-2707

## APPENDIX A

--These first and second real-time data signals I, II are respectively stored in a hard disk 36 as the temporal data which may be displayed on a hardware monitor 44, if necessary.

The first and second real-time data signals I, II are compared with allowable operation data by a comparator 40. And a result of the comparison of the real-time data is interpreted in an interpreter 42 and displayed on the monitor 44. If the result of the comparison is within 80% of the allowable data, an indicator 46 shows in the blue light, but if not, the light will turn to red.

The latest first and second real-time data I, II are respectively stored in a read-only memory 48, the magnetic field data in the first and second real-time data I, II are transferred to a calculator 52 to inspect variation thereof, the data of the temperature and wind speed which are stored in the read-only memory 48 are sent to a temporal data renewal device 54, and the vibration and noise data are processed by a First Fourier Transform (FFT) analyzer 52, and then these data are sent to the temporal date renewal device 54 so as to update them. Fluctuation in the magnetic flux data is calculated by a device 50 and this data is sent to the temporal data renewal device 54.--

divided into DC component and AC component.

The amplitude of each of fluctuations of analog data signals received by the sound level meter 20 flux meter 21 and vibration meter 22 is converted into a definite amplitude of a given duration, and transmitted to a terminal 30 of the computer system section C together with the output trigger signals from the main electronic apparatus P which show the behavior thereof.

These analog signals entered into the computer system section C are converted into digital signals by an A/D converter 32 and transmitted to a data accumulator 34 by which the data signals of flux, temperature and wind speed are summarized as a first real-time data I and the data signals of vibration and sound or noise are summarized as a second real-time data II.

These first and second real-time data signals I, II are respectively stored in a hard desk 36 as the temporal data which may be displayed on a hardware monitor <sup>44</sup>37 if necessary.

The first and second real-time data signals I, II are compared with allowable operation data by a comparator <sup>40</sup>38. And a result of the comparison of the real-time data with allowable data is interpreted in an interpreter <sup>42</sup>39 and displayed on the monitor <sup>44</sup>37. If the result of the comparison is within 80 % of the allowable data, an indicator 40 shows it in blue light, but if not, the light will turn to red.

The latest first and second real-time data I, II are respectively stored in a read-only memory <sup>48</sup>41, the magnetic field data in the first and second real-time data I, II are transferred to a calculator <sup>52</sup>42 to inspect variation thereof, the data of the temperature and wind speed which are stored in the ready-only memory <sup>48</sup>41 are sent to a temporal data renewal device <sup>54</sup>43, and the vibration and noise data are processed by a

Fast Fourier Transform (FFT) analyzer <sup>52.</sup> 44, and then these data are sent to the temporal data renewal <sup>device 54</sup> [circuit 43] so as to update them. \*

As stated in the above, the latest data which are measured with respect to the behavior and environment conditions of the main apparatus P may be renewed.

\* If instructions in the magnetic data is calculated by a device 50 and this data is sent to the temporal data renewal device

## ABSTRACT

A system for monitoring the behavior and environmental conditions of a high precision electronic apparatus comprising a measuring device section (M) including a plurality of sensors (12, 13, 14, 15, 16 and 17) arranged around said high precision electronic apparatus (P) which is mounted on a vibration preventing mount (B) for detecting environmental conditions as analog data signals, and means for filtering and amplifying each of said analog data signals (20, 21 and 22), and a computer system section (C) connected with said measuring device section (M) having an A/D converter (32) for converting said analog data signals into digital data signals, a data collection circuit (34) for collecting said digital data, means (4) for recording and setting prescribed allowable environmental condition data, means (42) for comparing said allowable environmental condition data with said digital data, means (46) for producing warning signal if abnormalities between said allowable environmental condition data and said digital data obtained in operation of said apparatus, a First Fourier Transform (FFT) analyzer (38) for converting said digital data so as to display as a graph on a monitor (44), a read-only (48) for storing said digital data, means (50) for calculating fluctuation of said magnetic flux data, means (52) for calculating fluctuation of said vibration data, and means (54) for storing said fluctuation of said magnetic flux and vibration data as temporal data.

FIG. 1A

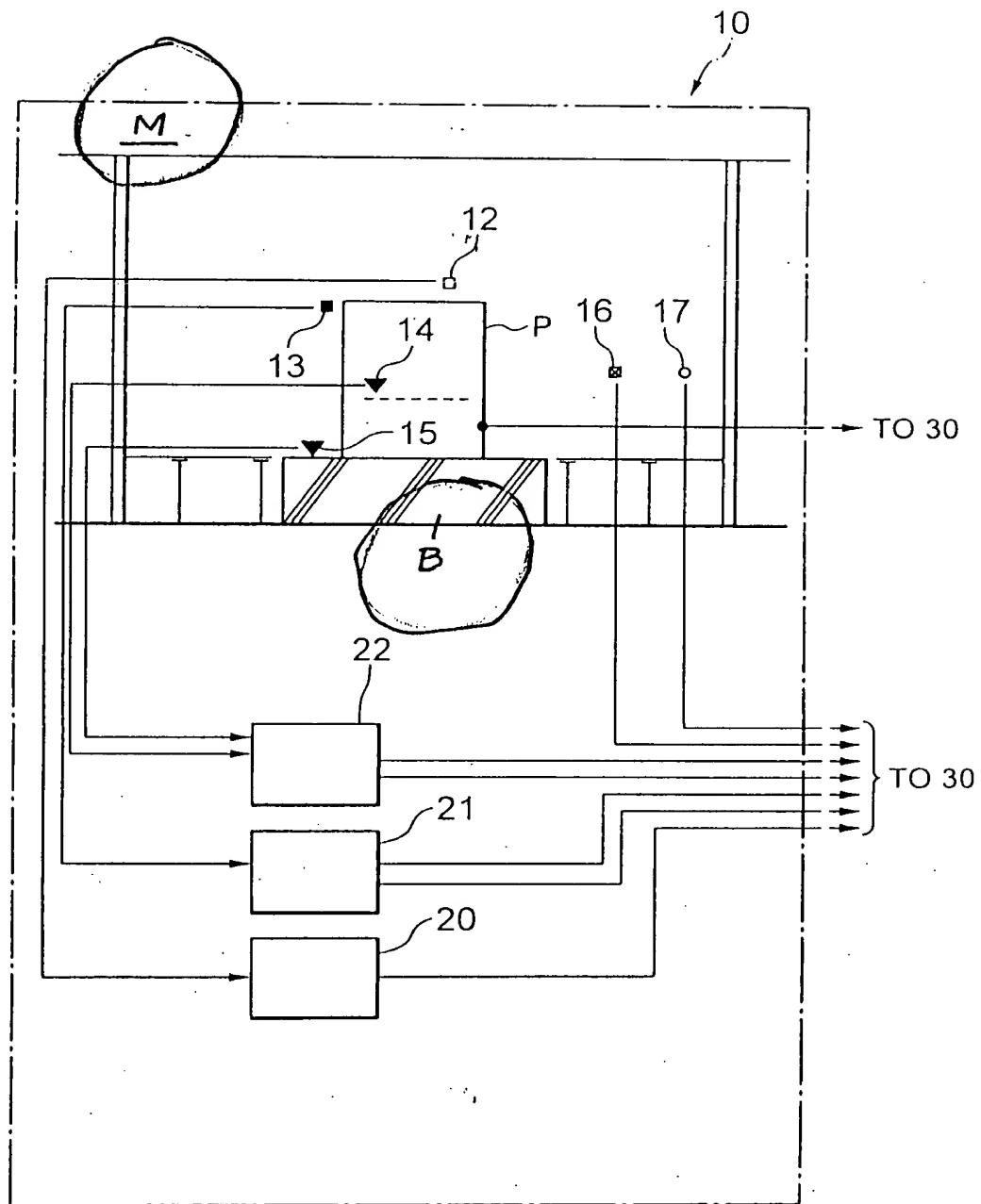




FIG. 1B

